

Title (en)  
CHIRP LINEARITY DETECTOR FOR RADAR

Title (de)  
CHIRP-LINEARITÄTSDETEKTOR FÜR RADAR

Title (fr)  
DÉTECTEUR DE LINÉARITÉ DE COMPRESSION D'IMPULSIONS POUR RADAR

Publication  
**EP 3531162 B1 20240117 (EN)**

Application  
**EP 18305208 A 20180227**

Priority  
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Abstract (en)  
[origin: EP3531162A1] A chirp linearity detector, integrated circuit, and method are provided. The chirp linearity detector comprises a signal source frequency sampling circuit and a frequency sweep linearity measuring circuit. The signal source frequency sampling circuit comprises a programmable-divisor frequency divider circuit for receiving a signal source output signal from a signal source and for providing a frequency divided output signal, a first low pass filter circuit for receiving the frequency divided output signal, for reducing harmonic mixing, and for providing a mixer input signal, a mixer circuit for receiving the mixer input signal, for mixing the mixer input signal with a local oscillator signal, and for providing a mixer output signal, a second low pass filter circuit for performing anti-aliasing filtering and for providing an analog-to-digital converter (ADC) input signal, and an ADC circuit for digitizing the ADC input signal and for providing a digital output signal.

IPC 8 full level  
**G01S 7/03** (2006.01); **G01S 7/35** (2006.01); **G01S 7/40** (2006.01); **G01S 13/34** (2006.01); **G01S 13/931** (2020.01); **H03L 7/093** (2006.01); **H03L 7/197** (2006.01); **G01S 13/28** (2006.01)

CPC (source: CN EP US)  
**G01S 7/032** (2013.01 - EP); **G01S 7/35** (2013.01 - EP US); **G01S 7/40** (2013.01 - CN); **G01S 7/4008** (2013.01 - EP); **G01S 7/4017** (2013.01 - EP US); **G01S 7/4056** (2013.01 - US); **G01S 7/5203** (2013.01 - US); **G01S 13/343** (2013.01 - EP); **G01S 13/931** (2013.01 - EP); **H03L 7/0805** (2013.01 - US); **H03L 7/093** (2013.01 - US); **H03L 7/1072** (2013.01 - US); **H03L 7/12** (2013.01 - US); **H03L 7/197** (2013.01 - EP); **G01S 13/282** (2013.01 - EP)

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